Ten-Year Solid Waste Management Plan

Lumpkin County and The City of Dahlonega

2004-2013

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Introduction

Authorization

The preparation of this solid waste management plan was authorized by the Lumpkin County Commission and the Dahlonega City Council.

Objectives

The objective of this plan is to meet the requirements of the Georgia Comprehensive Solid Waste Management Act of 1990 as they pertain to Lumpkin County and The City of Dahlonega. The primary goals of both this act and the respective governments are:

1. To insure that appropriate actions are taken by both Lumpkin County and The City of Dahlonega to reduce by a 25% per capita rate the solid waste production from citizen, commercial, and industrial sources, in both a constructive and realistic manner.
2. To insure that local community solid waste management systems are adequate and sustainable for meeting the reduction, collection, handling, and disposal needs of the citizens of Lumpkin County and The City of Dahlonega for the ensuing ten-year period.

The plan will address both the minimum planning standards and various procedures promulgated by the Georgia Solid Waste Management Act and the special circumstances concerning Lumpkin County and The City of Dahlonega with respect to solid waste management services. These plan objectives are based on the following goals:

1. Providing for the assurance of adequate and sustainable solid waste collection and disposal capacity within the proscribed planning areas for at least ten years from the date of plan completion.

2. Promoting various programs to reduce by 25% the per capita rate of municipal solid waste disposed of statewide in solid waste facilities. (Base year of study considered to be 1992)

3. Identifying solid waste handling facilities within the plan's area according to relative size and operational design.

4. Identifying various land regions in the planning area unsuitable for solid waste handling facilities based on environmental concerns, land-use restrictions, or geographical factors.

Definitions

(1) "Active Life" means the period of operation beginning with the initial receipt of solid waste and ending at completion of closure activities.

(2) "Active Portion" means that part of a solid waste handling facility or landfill unit that has received or is receiving wastes and that has not been closed.

(3) "Aquifer" means a geological formation, group of formations, or portion of a formation capable of yielding significant quantities of ground water to wells or springs.

(4) "Affected County" means, in addition to the county in which a facility is or is proposed to be located, each county contiguous to the host county and each county and municipality within a county that has a written agreement with the facility to dispose of solid waste.

(5) "Asbestos-Containing Waste" means any solid waste containing more than 1 percent, by weight, of naturally occurring hydrated mineral silicates separable into commercially used fibers, specifically the asbestiform varieties of serpentine, chrysotile, cummingtonite- grunerite, amosite, riebeckite, crocidolite, anthophyllite, tremolite, and actinolite.

(6) "Baling" means a volume reduction technique whereby solid waste is compressed into bales.

(7) "Biomedical Waste" means any solid waste which contains pathological waste, biological waste, cultures, and stocks of infectious agents and associated biologicals, contaminated animal carcasses (body parts, their bedding, and other wastes from such animals), chemotherapy waste, discarded medical equipment

and parts, not including expendable supplies and materials, which have not been decontaminated, as further defined in Rule 391-3-4-.15.

(8) "Boiler" means a device as defined in Chapter 391-3-11, the Rules for Hazardous Waste Management.

(9) "Certificate" means a document issued by a college or university of the University System of Georgia or other organization approved by the Director, stating that the operator has met the requirements of the Board for the specified operator classification of the certification program.

(10) "Closure" means a procedure approved by the Division which provides for the cessation of waste receipt at a solid waste disposal site and for the securing of the site in preparation for post-closure.

(11) "Collector" means the person or persons as defined herein who, under agreements, verbal or written, with or without compensation does the work of collecting and/or transporting solid wastes, from industries, offices, retail outlets, businesses, institutions, and/or similar locations, or from residential dwellings, provided however, that this definition shall not include an individual collecting and/or transporting waste from his own single family dwelling unit.

(12) "Commercial solid waste" means all types of solid waste generated by stores, offices, restaurants, warehouses, and other nonmanufacturing activities, excluding residential and industrial wastes.

(13) "Composting" means the controlled biological decomposition of organic matter into a stable, odor free humus.

(14) "Construction/Demolition Waste" means waste building materials and rubble resulting from construction, remodeling, repair, and demolition operations on pavements, houses, commercial buildings and other structures. Such wastes include, but are not limited to asbestos containing waste, wood, bricks, metal, concrete, wall board, paper, cardboard, inert waste landfill material,

and other nonputrescible wastes which have a low potential for groundwater contamination.

(15) "Detected" means statistically significant evidence of contamination has been determined to exist by using methods specified in Rule 391-3-4-.14.

(16) "Director" means the Director of the Environmental Protection Division of the Department of Natural Resources.

(17) "Disposal Facility" means any facility or location where the final disposition of solid waste occurs and includes, but is not limited to, landfilling and solid waste thermal treatment technology facilities.

(18) "Division" means the Environmental Protection Division of the Department of Natural Resources.

(19) "Existing MSWLF or landfill unit" means:

(a) any municipal solid waste landfill or landfill unit that is receiving solid waste as of October 9, 1993 and meets either of the following two conditions:

1. disposed of over 100 tons per day (TPD) of solid waste between October 9, 1991 and October 9, 1992 (or other dates consistent with Federal standards and as may be approved by the Director), or;

2. is on the National Priorities List (NPL), as found in appendix B to 40 CFR, Part 300.

(b) any municipal solid waste landfill or landfill unit that is receiving solid waste as of April 9, 1994 and meets the following two conditions:

1. disposed of 100 tons or less per day of solid waste between October 9, 1991 and October 9, 1992, and disposes of no more than an average of 100 TPD of solid waste each month between October 9, 1993 and April 9, 1994(or other dates consistent with Federal standards and as may be approved by the Director), and;

2. is not on the National Priorities List (NPL), as found in appendix B to 40 CFR, Part 300.

(c) Waste placement in existing units must be consistent with past operating practices or modified practices to ensure good management.

(20) "Generator" means any person in Georgia or in any other state who creates solid waste.

(21) "Garbage" means food waste including waste accumulations of animal or vegetable matter used or intended for use as food, or that attends the preparation, use, cooking, dealing in or storing of meat, fish, fowl, fruit or vegetables.

(22) "Groundwater" means water below the land surface in a zone of saturation.

(23) "Hazardous Waste" means any solid waste which has been defined as a hazardous waste in regulations promulgated by the Board of Natural Resources, Chapter 391-3-11.

(24) "Household waste" means any solid waste (including garbage, trash, and sanitary waste in septic tanks) derived from households (including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas).

(25) "Host Local Government" means the host county or other local host governmental jurisdiction within whose boundaries a municipal solid waste disposal facility is located.

(26) "Industrial Furnace" means a device as defined in Chapter 391-3-11, the Rules for Hazardous Waste Management.

(27) "Industrial Waste" means solid waste generated by manufacturing or industrial processes that is not a hazardous waste regulated under the Hazardous Waste Management Act and regulations promulgated by the Board of Natural Resources, Chapter 391-3-11. Such waste includes, but is not limited to, wastes resulting from

the following manufacturing processes: Electric power generation; fertilizer/agricultural chemicals; food and related products/byproducts; inorganic chemicals; iron and steel manufacturing; leather and leather products, nonferrous metals manufacturing/ foundries; organic chemicals; plastics and resins manufacturing; pulp and paper industry; rubber and miscellaneous plastic products; stone, glass, clay, and concrete products; textile manufacturing; transportation equipment; and water treatment. This term does not include mining waste or oil and gas waste.

(28) "Inert Waste Landfill" means a disposal facility accepting only wastes that will not or are not likely to cause production of leachate of environmental concern. Such wastes are limited to earth and earth-like products, concrete, cured asphalt, rock, bricks, yard trimmings, stumps, limbs, and leaves. This definition excludes industrial and demolition waste not specifically listed above.

(29) "Lateral expansion" means a horizontal expansion of the waste boundaries of an existing MSWLF unit or landfill unit.

(30) "Leachate" means a liquid that has passed through or emerged from solid waste and contains soluble, suspended, or miscible materials removed from such wastes.

(31) "Landfill Unit" means an area of land on which or an excavation in which solid waste is placed for permanent disposal and which is not a land application unit, surface impoundment, injection well, or compost pile. Permanent disposal requires the placement of daily, intermediate, and/or final earth, synthetic, or a combination of earth and synthetic cover over the solid waste.

(32) "Leachate Collection System" means a system at a landfill for collection of the leachate which may percolate through the waste and into the soils surrounding the landfill.

(33) "Liner" means a continuous layer of natural or man-made

materials, beneath or on the sides of a disposal site or disposal site cell which restricts the downward or lateral escape of solid waste, solid waste constituents, or leachate.

(34) "Liquid Waste" means any waste material that is determined to contain "free liquids" as defined by Method 9095 (Paint Filter Liquids Test), as described in "Test Methods for the Evaluation of Solid Wastes, Physical/Chemical Methods" (EPA Pub. No. SW-846).

(35) "Materials Recovery Facility" means a solid waste handling facility that provides for the extraction from solid waste of recoverable materials, materials suitable for use as a fuel or soil amendment, or any combination of such materials.

(36) "Monofill" means a method of solid waste disposal that involves the landfilling of one waste type or wastes having very similar characteristics in a segregated trench or area which is physically separated from dissimilar or incompatible waste.

(37) "Municipal Solid Waste" means any solid waste derived from households, including garbage, trash, and sanitary waste in septic tanks and means solid waste from single-family and multifamily residences, hotels and motels, bunkhouses, campgrounds, picnic grounds, and day use recreation areas. The term includes yard trimmings and commercial solid waste, but does not include solid waste from mining, agricultural, or silvicultural operations or industrial processes or operations.

(38) "Municipal Solid Waste Landfill (MSWLF) Unit" means a discrete area of land or an excavation that receives household waste, and that is not a land application unit, surface impoundment, injection well, or waste pile, as those terms are defined under 40 CFR Part 257.2. A MSWLF unit also may receive other types of solid waste, such as commercial solid waste, nonhazardous sludge, small quantity generator waste and industrial solid waste. Such a landfill may be publicly or privately owned. A MSWLF unit

may be a new MSWLF unit, an existing MSWLF unit or a lateral expansion.

(39) "Municipal Solid Waste Disposal Facility" means any facility or location where the final deposition of any amount of municipal solid waste occurs, whether or not mixed with or including commercial or industrial solid waste, and includes, but is not limited to, municipal solid waste landfills and solid waste thermal treatment technology facilities.

(40) "Municipal Solid Waste Disposal Facility Operator" means the operator certified in accordance with Rule 391-3-4-.18 and stationed on the site who is in responsible charge of and has direct supervision of the daily field operations of a municipal solid waste disposal facility to ensure that the facility operates in compliance with the permit.

(41) "Municipal Solid Waste Landfill" means a disposal facility where any amount of municipal solid waste, whether or not mixed with or including commercial waste, industrial waste, nonhazardous sludges, or small quantity generator hazardous wastes, is disposed of by means of placing an approved cover thereon.

(42) "New MSWLF Unit" means any municipal solid waste landfill unit that has not received waste prior to October 9, 1993.

(43) "Open Burning" means the combustion of solid waste without:

a. Control of combustion air to maintain adequate temperature for efficient combustion;

b. Containment of the combustion reaction in an enclosed device to provide sufficient residence time and mixing for complete combustion; and

c. Control of the emission of the combustion products.

(44) "Open Dump" means a disposal facility at which solid waste from one or more sources is left to decompose, burn or to otherwise create a threat to human health or the environment.

(45) "Operating Record" means written records including, but not limited to, permit applications, monitoring reports, inspection reports, and other demonstrations of compliance with this Chapter, which records are kept on file at the facility or at an alternative location as approved by the Division.
(46) "Operator" means the person(s) responsible for the overall operation of a facility or part of a facility.
(47) "Owner" means the person(s) who owns a facility or part of a facility.
(48) "Person" means the State of Georgia or any other state or any agency or institution thereof, and any municipality, county, political subdivision, public or private corporation, solid waste authority, special district empowered to engage in solid waste management activities, individual, partnership, association or other entity in Georgia or any other state. This term also includes any officer or governing or managing body of any municipality, political subdivision, solid waste authority, special district empowered to engage in solid waste activities, or public or private corporation in Georgia or any other state. This term also includes employees, departments, and agencies of the federal government.
(49) "Post-closure" means a procedure approved by the Division to provide for long-term financial assurance, monitoring, and maintenance of a solid waste disposal facility to protect human health and the environment.
(50) "Private Industry Solid Waste Disposal Facility" means a disposal facility which is operated exclusively by and for a private solid waste generator for the purpose of accepting solid waste generated exclusively by said private solid waste generator.
(51) "Processing Operation" means any method, system or other treatment designed to change the physical form or chemical content

of solid waste and includes all aspects of its management (administration, personnel, land, equipment, buildings and other elements).

(52) "Putrescible Wastes" means wastes that are capable of being quickly decomposed by microorganisms. Examples of putrescible wastes include but are not necessarily limited to kitchen wastes, animal manure, offal, hatchery and poultry processing plant wastes, dead animals, garbage and wastes which are contaminated by such wastes.

(53) "Run-off" means any rainwater, leachate, or other liquid that drains over land from any part of a facility.

(54) "Run-on" means any rainwater, leachate, or other liquid that drains over land onto any part of a facility.

(55) "Recovered Materials" means those materials which have known use, reuse, or recycling potential; can be feasibly used, reused or recycled; and have been diverted or removed from the solid waste stream for sale, use, reuse, or recycling, whether or not requiring subsequent separation and processing.

(56) "Recovered Materials Processing Facility" means a facility engaged solely in the storage, processing, and resale or reuse of recovered materials. Such term shall not include a solid waste handling facility; provided, however, any solid waste generated by such facility shall be subject to all applicable laws and regulations relating to such solid waste.

(57) "Recycling" means any process by which materials which would otherwise become solid waste are collected, separated, or processed and reused or returned to use in the form of raw materials or products.

(58) "Regional Landfill or Regional Solid Waste Disposal Facility" means a facility owned by a county, municipality, or special district empowered to engage in solid waste management activities, or any combination thereof, which serves two or more or

any combination of counties, municipalities, or special solid waste districts.

(59) "Relevant Point of Compliance" is a vertical surface located at the hydraulically downgradient limit of the waste management unit boundary that extends down into the uppermost aquifer underlying the facility. This point will be specified by the Director and shall be no more that 150 meters from the waste management unit boundary and shall be located on land owned by the owner of the landfill unit. The downgradient monitoring system must be installed at this point, and monitoring conducted to ensure that the concentration values listed in Table 1 of Rule 391-3-4-.07 will not be exceeded in the uppermost aquifer.

(60) "Saturated Zone" means that part of the earth's crust in which all voids are filled with water.

(61) "Scavenge" means the unpermitted removal of solid waste from a solid waste handling facility.

(62) "Shredding" means the process by which solid waste is cut or torn into small pieces for final disposal or further processing.

(63) "Significant Groundwater Recharge Areas" means any area as designated on Hydrologic Atlas 18 Most Significant Ground-Water Recharge Areas of Georgia, 1989, as published by the Georgia Geologic Survey, Environmental Protection Division, Georgia Department of Natural Resources, unless an applicant for a solid waste handling permit or other interested party can demonstrate to the satisfaction of the Director that an area designated on Hydrologic Atlas 18 is or is not, in fact, a significant groundwater recharge area.

(64) "Sludge" means any solid, semi-solid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution

control facility exclusive of the treated effluent from a wastewater treatment plant.

(65) "Solid Waste" means any garbage or refuse; sludge from a wastewater treatment plant, water supply treatment plant, or air pollution control facility; and other discarded material including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations and from community activities, but does not include recovered materials; solid or dissolved materials in domestic sewage; solid or dissolved materials in irrigation return flows or industrial discharges that are point sources subject to permit under 33 U.S.C. Section 1342; or source, special nuclear, or by-product material as defined by the federal Atomic Energy Act of 1954, as amended (68 Stat. 923).

(66) "Solid Waste Handling" means the storage, collection, transportation, treatment, utilization, processing, or disposal of solid waste, or any combination of such activities.

(67) "Solid Waste Handling Facility" means any facility, the primary purpose of which is the storage, collection, transportation, treatment, utilization, processing, or disposal, or any combination thereof, of solid waste.

(68) "Solid Waste Handling Permit" means written authorization granted to a person by the Director to engage in solid waste handling.

(69) "Solid Waste Management Act" or the "Act", wherever referred to in these Rules, means the Georgia Comprehensive Solid Waste Management Act, O.C.G.A. 12-8-20, et seq.

(70) "Solid Waste Thermal Treatment Technology" means any solid waste handling facility, the purpose of which is to reduce the amount of solid waste to be disposed of through a process of combustion, with or without the process of waste to energy.

(71) "Tire" means a continuous solid or pneumatic rubber covering designed for encircling the wheel of a motor vehicle and which is neither attached to the motor vehicle nor a part of the motor vehicle as original equipment.
(72) "Transfer Station" means a facility used to transfer solid waste from one transportation vehicle to another for transportation to a disposal facility or processing operation.
(73) "Uppermost Aquifer" means the geologic formation nearest the natural ground surface that is an aquifer, as well as lower aquifers that are hydraulically interconnected with this aquifer within the solid waste handling facility's property boundary.
(74) "Vertical Expansion" means the expansion of a landfill beyond the approved maximum final elevations and within the approved waste management boundaries of the existing permit.
(75) "Waste Management Unit Boundary" means a vertical surface located at the hydraulically downgradient limit of the unit. This vertical surface extends down into the uppermost aquifer.
(76) "Waste-to-Energy Facility" means a solid waste handling facility that provides for the extraction and utilization of energy from municipal solid waste through a process of combustion.
(77) "Yard Trimmings" means leaves, brush, grass, clippings, shrub and tree prunings, discarded Christmas trees, nursery and greenhouse vegetative residuals, and vegetative matter resulting from landscaping development and maintenance other than mining, agricultural, and silvacultural operations.

Background Information

Lumpkin County is approximately 286 square miles and located within the foothills of the Appalachian Mountains in Northeast Georgia. The county's population growth was

44.2% from 1990 to 2000 and is accelerating primarily through migration (87% of change). Growth rates will likely more than double the county within the next ten years and community leaders have recognized the planning urgency and responded, most notably, through formation of the county's first Land-Use Code. Other ordinances, including a solid waste ordinance, a scrap tire ordinance, and a soil and sedimentation control ordinance have been passed to alleviate environmental pressures resulting from increased development, yet in dealing with solid waste reduction and related solid waste issues, the county has many challenges ahead.

The City of Dahlonega has a population of 3,638 with a ten-year (1990-2000) growth percentage of 13.3%. Dahlonega is a rapidly expanding center of commercial activity within Lumpkin County. The city hosts many fairs and festivals throughout the year – including The Gold Rush Days Festival, The Bear on the Square Festival, The Wildflower Festival, The Mountain Music Fair, and The Dahlonega International Film Festival – which draw hundreds of thousands of visitors yearly. The city's picturesque square is also the center of much local activity with music and eateries that appeal to an eclectic variety of interests. Dahlonega, an Official Tree City, has enthusiastically invested in many green initiatives including reforestation programs, city park expansion, and beautification programs most recently. The city has begun our new millennium with a progressive push to reinvigorate the adventurous and entrepreneurial spirit that so symbolizes its past history.

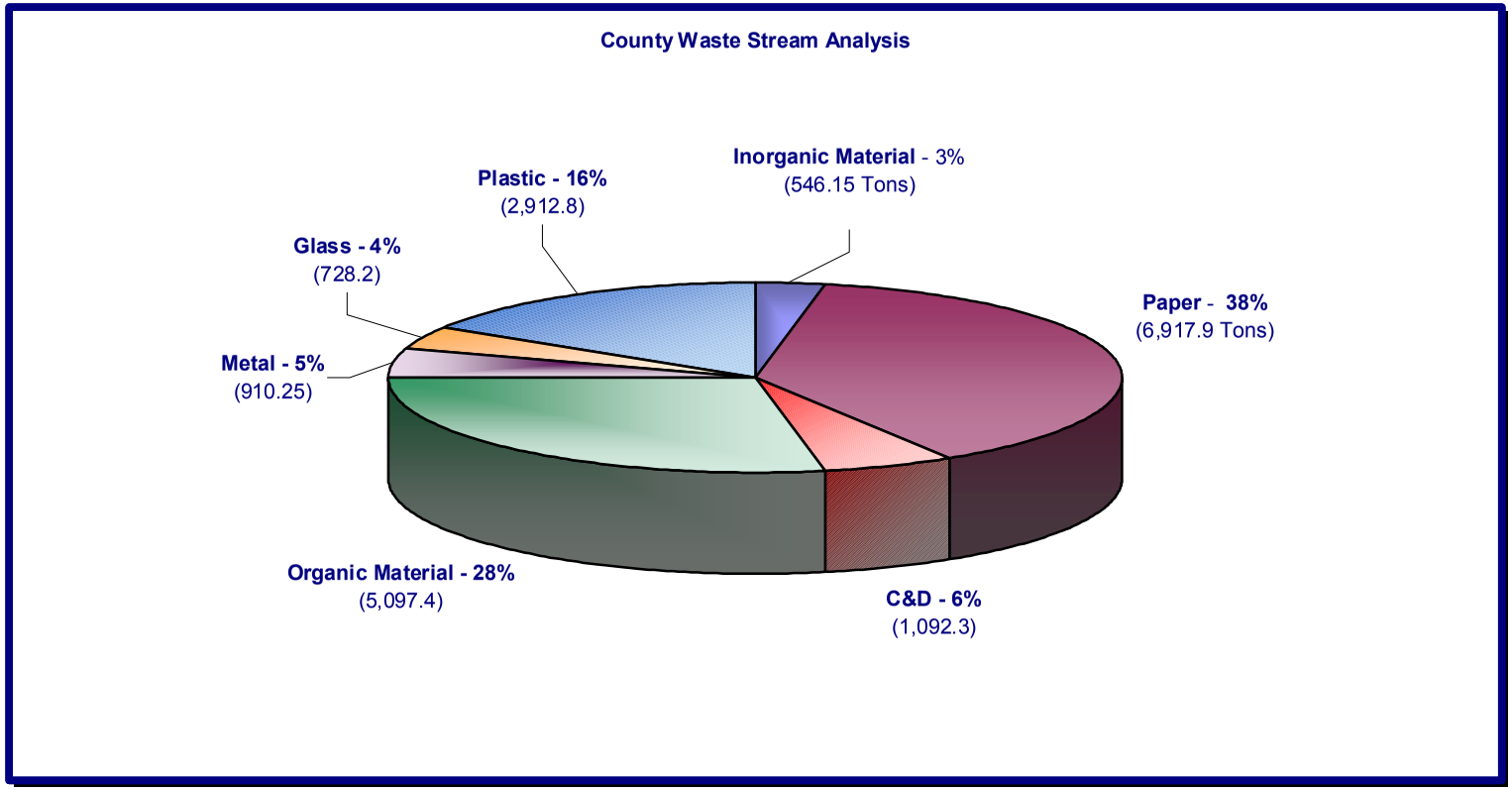
Upon assuming office in January 2001, the present County Commission recognized a great disparity in fees collected and the actual costs of operating the county's solid waste management system. The county was also behind in planned activities for post-closure at the former city/county landfill. Further, the former county administration had written and received a GEFA grant ($100,000) specifically geared toward recycling services and facilities (1998) and had utilized these funds for the construction of a waste transfer facility instead. Without facilities or a budget for services, few realistic recycling services were being provided for interested citizens, even as the costs for waste transfer and the tonnage amount of municipal waste were increasing. County administrators immediately

formed a two-phase strategy. In order to bring management expenses more in line with service revenues, fees must be increased and operations streamlined. In order to lower transfer fees, waste tonnage diversion must be improved through increased recycling rates.

Even as consideration for these realities was underway, both the county and city were examining options for future waste management activities. The City of Dahlonega, in order to maintain a greater degree of control over waste management costs and waste reduction initiatives, made plans to and in 2003 constructed a waste transfer center adjacent to the city's wastewater treatment plant.

Waste Stream Analysis

***Figures based on Department of Community Affairs Waste Characterization Study**
***Total Tons for Lumpkin County in 2003 = 18,205 (EPD Landfill Volume Reports)**



Waste Stream Analysis

Waste Generators and Components

Residential – Residential waste production is constituted by a combination of organic materials such as food waste and yard trimmings; various small bulk inorganic wastes due primarily to product packaging and general residential activities; plastic derived primarily from product packaging and beverage bottles; metal primarily derived from cans and product packaging; paper in the form of corrugated containers, magazines, newspapers, product packaging and various other sources; and glass derived from food and beverage packaging.

Commercial – Commercial waste production is constituted by a combination of organic materials primarily including food waste and yard trimmings; various large bulk inorganic materials due primarily to packaging and general commercial activity; plastic derived from product packaging and various commercial activities; metal derived from product packaging; paper in the form of corrugated containers, product packaging, and various mixed papers; and glass derived primarily from product packaging and various lesser sources.

Industrial – Industrial waste production is constituted by a combination of various large bulk inorganic materials related to production processes and raw materials; plastic derived from product packaging, production processes, and various containers; metal derived from product packaging and production processes; paper derived from production processes, product packaging, and various mixed uses; and glass derived from production processes, product packaging, and raw material usage.

Development / Building Industry – Development and building industry waste production is constituted by a combination of organic materials including yard trimmings and various inert materials (brush, tree stumps); various inorganic materials incidental to development activities; plastic derived primarily from product packaging and development by-products; metal derived primarily from product packaging and incidental to development activities; paper derived from product packaging and incidental to development activities; glass derived primarily from packaging and incidental usage; and construction and demolition waste derived from and incidental to development activities.

Tourism / Special Events – Tourism and special events industry waste production is constituted by a combination of organic materials primarily including food waste; plastic derived from product packaging and beverage containers; metal primarily derived from product packaging and containers; paper primarily derived from corrugated containers, product packaging, and various mixed paper uses; and glass derived primarily from product packaging.

Waste Reduction Element Chapter 1

Inventory and Assessment of Existing Programs

According to the 2002 Georgia Solid Waste Management Update, the State of Georgia's 25% waste disposal reduction goals is a per capita reduction goal based upon all municipal solid waste disposed within the state. This figure does not exclude waste generated from out of state sources and disposed in landfills located within the state. The impact of out of state waste imports plays a role in the state achieving the 25% waste disposal reduction goal. The average amount of waste disposed in Georgia was recorded as 8.25 pounds per person per day including construction and demolition material and 6.05 pounds including only municipal waste and excluding out of state waste imports. This average is several pounds above the national average waste generation of approximately 4.0 pounds per person per day.

Lumpkin County

Currently, Lumpkin County's recycling efforts are concentrated within the county's waste transfer facility complex and include the recycling of scrap metals, newspapers, office paper, phonebooks, magazines, cardboard, aluminum cans, steel/tin cans, #1 and #2 plastics, and glass. The collection of these materials is realized through the county's affiliation with North Georgia Resource Management Authority (NGRMA), a Keep Our Mountains Beautiful affiliate. Lumpkin County is a founding and active member of this resource management authority. NGRMA signed a contract in early 2004 with Southeastern Paper Inc. (S&P) that included collection of the materials mentioned using a tractor-trailer provided by S&P. Within the provided trailer, S&P supplies collection boxes marked for their respective material and lining the inside trailer walls, providing easy access and identification for citizens. The contract includes all NGRMA member counties and provides a base material market value with the inclusion of percentage increases that are indexed for market fluctuation. The Lumpkin County Courthouse and Planning Offices also recycle mixed and office paper at this location. Some private waste haulers within the county are engaged in recycling scrap metals, but few of these businesses have found other materials to be profitable or feasible with limited volumes

and the relatively high costs of material transfer. Waste Haulers and recyclers Working within Lumpkin County are not currently required to report the amounts of either recyclables or solid waste that is collected from county citizens.

The citizens of Lumpkin County do not currently have a variety of options regarding outreach and education concerning solid waste and recycling other than those conducted within the school system on individual administrators' (principals or teachers) prerogatives. NGRMA provides each school within the authority's member counties (k-12) with a curriculum package for environmental education, including materials concerning reuse and recycling, that is designed to provide class lessons and learning tools for different age groups. The county does employ one Environmental Compliance Officer who engages building industry members on the use of compost and mulch in erosion control, proper disposal of and recycling of construction debris, and other aspects of sustainable building practices, but due to the time limitations and capabilities of one individual and the demands of construction oversight in a fast growing community, little if any of the officer's time is spent on significant public education and outreach concerning recycling and material reuse. The officer's responsibilities do include inspecting the scrap tire industry as well as responding to citizen complaints concerning littering and illegal dumping.

The county's environmental officer has played a key role in attempts to establish a regional recycling cooperative including the participation of Lumpkin, Dawson, Banks, Union, and Towns counties that began with the submission of a waste reduction and recycling grant to the Georgia Environmental Facilities Authority (GEFA) in late 2001. This grant, now discontinued due to state government cutbacks in Solid Waste Trust Fund allocations, awarded $200,000 to Lumpkin County for the construction of a Recovered Materials Processing Facility (RMPF) that is to be the center of the regional

cooperative. Later grant awards in 2002 – in the amounts of $100,000 and $50,000 – are to go toward acquisition of a material transfer vehicle (Ford F-700) to be delivered to NGRMA in November 2004 and the first of many planned material drop-off depots, placed in commercial and high traffic areas, which will be placed within member counties region-wide. The 2002 depot grant, in particular, was awarded to Dawson for that county's initial depot site to be delivered in November 2004. NGRMA is to oversee the operations and administration of the regional cooperative and to be funded through both member county fees ($20,000 per year per member county) and the revenue from material brokerage. The cooperative was initially to have used GEFA grants for the establishment of depot sites within member counties, ideally one each per year for five years, in order to reach a 'saturation' point in year five of cooperative operations such that within each member county few if any citizens would reside more than ten miles from a material collection depot site. Instead, given the defunct nature of the yearly GEFA grant cycle, NGRMA will conduct outreach efforts within the private sector to encourage not only increases in devoted materials, but also corporate 'membership' within the cooperative itself which would include revenue donations per membership status, in a similar fashion to County/City Chambers of Commerce with a graduated scale. In particular, corporations with operations in more than one member county could be ideal for cooperative membership. These revenues will be applied to drop-off depot acquisition in addition to those revenues provided through member county general funds for the same.

City of Dahlonega

The City of Dahlonega recycling program is primarily focused on curbside service throughout the city's jurisdiction. Materials are collected co-mingled in prescribed totes and later separated at the city's Waste Transfer/Recycling Facility located within the Public Works Complex. This facility is not open to public service, but rather serves as a processing site specifically for curbside collected materials. Recycled materials are then

brokered to the greatest economic advantage. Materials currently collected include newspaper, magazines, office paper, phonebooks, cardboard, aluminum, metal/tin cans, glass, and plastics #1 and #2.

Waste Reduction Element Chapter 1

Needs and Goals

Lumpkin County and the City of Dahlonega share the goal of assuring, at a minimum, a 25% annual waste reduction – by means of reuse, recycling, and conservation – through the year 2014 in the amount of solid municipal waste being collected throughout both county and city jurisdictions.

Lumpkin County and The City of Dahlonega

1) **Waste Source Reduction –** Source reduction of waste will prove to be a highly effective component in reducing the overall level of both county and city waste production and transfer.

A) Increasing Public Awareness – Both the county and the city need to expand public information programs concerning solid waste – the costs, who pays, and how both the volume and costs can be reduced. The establishment of an office of public information including aggressive information dissemination and real programmatic efforts, including intergovernmental participation are key to the success of this component.

- The reuse of appliances, furniture, and clothing are ideal methods in addressing conspicuous consumption. The reuse of these products by donation to community non-profit organizations, churches, and civic groups should be emphasized. Where applicable Churches, local thrift shops, and consignment businesses should be included in this community networking effort.
- Encouraging consumers and businesses to reduce their production of waste through more conscientious, 'smart' purchasing and use of various products – those with higher product life-spans and reusability – will educate the public with respect to wasteful packaging and purchasing practices.

- Building community recognition and awards programs with respect to schools, both governments, civic organizations, and businesses concerning waste reduction, recycling, and other environmental issues will help to raise awareness and support for programs that cannot thrive without a strong community network.
- Expanding public awareness and education concerning source reduction and recycling through poster programs, media campaigns, weekly newspaper columns, and radio announcements will compliment other efforts both from both public and private sources.

B) County Waste Policy – The county must create a waste policy which places an emphasis on statistics and reporting both to bring order into the local waste industry and to increase the government's ability to monitor its own activities, market trends, and waste industry developments. Commercial haulers, private businesses, and other solid waste facilities should report collection locations, volumes, and types of waste and /or recycled materials being collected from county residences and commercial activities – particularly concerning businesses and the development industry. These statistics would be an integral part of the county's efforts to analyze trends, assess efforts, and design waste policies. Programs aimed at both source reduction and material recycling can be better designed and targeted to affect those markets in highest need, providing for more effective and cost efficient programmatic efforts. Local government programs should be targeted to solving actual problems rather than 'best guess' scenarios and without appropriate

statistical information regarding local markets, program activities, and waste / recycling volumes public administrators are without dependable analysis, leading to sometimes wasteful and almost always ineffectual policies and actions. In addition to improved statistics and record keeping concerning the private waste industry, the county should emphasize responsible hauling practices in order to reduce instances of inadvertent littering along county and state thoroughfares. These programs should be part of a comprehensive and coordinated approach, including both incentives and punitive policy.

2) **Recycling** – The institution of effective recycling policies will inevitably prove to be the most effective waste reduction measure under local government control.

A) Recycling Drop-off Depots – Lumpkin County's initial material bin depot site will be delivered in November 2004. This site is the first of the approximately 6-8 sites necessary to reach a saturation point level within the entire county, meaning that at no time would any citizen reside more than ten miles from a drop-off depot. These sites will be placed in accordance to the Lumpkin County Future Land-Use Map, which outlines those areas within the county ideal for future growth and development as well as, and perhaps most important, where infrastructure will guide growth. These high-traffic nodes, traditional locations of both social and economic activity, will provide the high-profile ease and advantage citizens need to allow for maximum participation with minimum personal time sacrifice.

Within the county school system, ideally split bins should be placed at each school location, allowing for the highest number of materials to be collected and for each individual school to create a collection system with storage capability. Likewise, within North Georgia College and State University bins should be located to encourage participation and lower the physical barrier that may inhibit it.

In reference to industrial or commercial private industry material producers, bins should be placed on-site at these locations and serviced by the regional system. In order to exact the highest percentage of private industry participation, some form of 'by in' or dedication must be evident in order for success to be feasible. Without the marginal effort and economic investment provided by on-site bin locations (1-2 bins for instance, collecting 1-4 products), little realistic material tonnage will be gained from "encouraging" such participation from companies which are without appreciable system familiarity and even less cooperative enthusiasm.

B) Recycling Education and Outreach – The aforementioned county information office should offer brochures concerning program offerings, recycling system tours for new citizens including depot site and facility mapping and visits, and should host in-school events and classroom periods encouraging recycling and reuse and teaching children about the benefits of conservation oriented, sustainable living practices. Community outreach should be vigorous and informative, targeting both homeowners and private industry (commercial and industrial) with workshops and forums aimed at both incorporating participation and educating as to the benefits of such participation.

County government should build successful partnerships with local organizations such as the Lumpkin County Homebuilders Association, in order to network with key source producers of possible bulk materials and enlist field professionals to increase the legitimacy of participation within the larger community.

C) Private Waste Hauler Policy – The private waste industry (haulers, collectors) should be encouraged to increase their recycling activities and offerings. Through reasonable and feasible incentives private haulers should be helped to offer collection of primary recyclables (paper, plastic, aluminum, and glass), assisting not only in improving the services of these businesses, but the overall county participation percentage as well.

D) County Education System – As mentioned before, levels of both outreach and participation within respective school systems – NGCSU and the Lumpkin County School System – should be expanded.

E) County Seasonal and Events Collection Policy – NGRMA has included a clause in negotiations with the equipment supply company for both material collection bins and the material transfer vehicle (V-Quip, Inc.) which specifies the inclusion of a special events trailer (3-6 yd. bin containers) without charge given the purchase of 19 material collection bins (3 large sites of 8 bins each, or 5 small sites of 4-bins each). Equipment of this type will be integral to capturing the potential windfall of materials discarded in seasonal and special events yearly throughout NGRMA member counties. These events – The Gold Rush Days, The Wildflower Festival, Bear on the Square, Mountain Music

Fest, and The Wine Country Festival in Lumpkin County alone – draw several hundred thousand tourists and travelers to our region yearly and generate many thousand tons of primary materials (PETE, HDPE, OCC, Aluminum) that largely are left untapped. From both the material tonnage and the public relations perspectives, these opportunities must be expanded and capitalized.

F) County and City Government Recycling Policy – County and City governments should install mandatory programs within government facilities in order to set an example for the private industry and maintain a level of consistency in program offerings and administration actions.

3) **Composting** – Composting is an environmentally and ecologically beneficial alternative to land-filling organic materials – yard waste, vegetable waste – that we might instead return to rich humus. By doing so we both reduce the volume of materials we landfill and we enrich our own gardens and landscaping.

A) Home Composting – Efforts to encourage home composting should increase including seminars and workshops in conjunction with the County Extension Service. Although instruction on home composting is readily available in the Extension Office, outreach on a wide scale has not been instituted.

B) Neighborhood Composting – Efforts to encourage homeowners associations and neighborhood groups to actively promote composting

will be increased, also in conjunction with the Extension Office and likewise through community workshops and organizations such as 4-H, The Future Farmers of America, and The Boy Girl Scouts.

C) Community Composting – Efforts in relation to the establishment of community compost or mulch programs have been lacking. Although 'Bring one to the Chipper' programs have been accomplished in the past, the community does not have an established or routine location to access mulch or compost materials. With the construction of the regional recycling facility, the county will establish an on-site area where community composting may take place. By using recycling facility equipment (front-end loader), the county will turn the composting materials and will make finished compost routinely available to county citizens.

Waste Collection Element Chapter 2

Inventory and Assessment of Existing Programs

Lumpkin County

Solid Waste Collection

Currently, county citizens have two options in disposing of their waste: to contract with one of many private waste haulers and receive the offered services from this business, or to personally dispose of materials at the county operated waste transfer center located adjacent to the former county landfill location, closed in 1998. **Table 2.1** illustrates known private waste collection companies and their offered services. The county government considered placing manned waste collection centers in conjunction with planned recycling drop-off depots, but this option proved to be cost prohibitive, due not only to the costs associated with depot construction within each of the four county districts, but also to topographical concerns given the county's mountainous terrain and thus the higher costs of waste transfer. **Chart 2.1** illustrates the county's waste production for the last ten years. Lumpkin County's solid waste production for 2003 was 18,205.33 tons. .

Table 2.1 – Solid Waste Service Providers and offered Services

Waste Collection Company	Waste Collection Services	Scrap Metal Recycling	General Recycling Services	waste transfer services	Transfer / Landfilling Inert Materials
Ken's Recycling Inc.	X	X			
Burnett's Garbage Services	X				
AAA Sanitation Services	X	X	X	X	
Ronny Sisk Garbage Collection	X				
HWY. 400 Inert Landfill					X
Robinson Contracting		X	X	X	

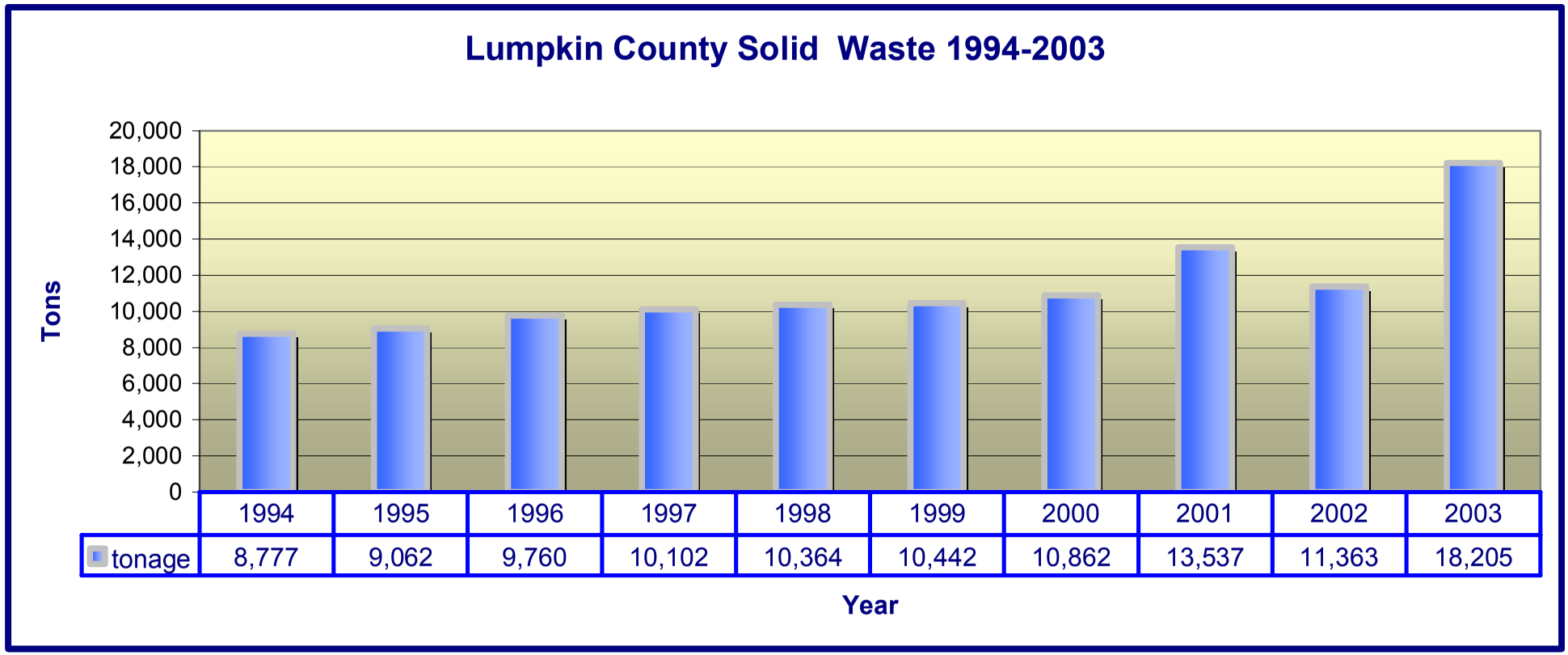

Lumpkin County Solid Waste 1994-2003
Tons
20,000
18,000
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
1994 1995 1996 1997 1998 1999 2000 2001 2002 2003
tonage 8,777 9,062 9,760 10,102 10,364 10,442 10,862 13,537 11,363 18,205
Year

Chart 2.1

Waste Collection Element Chapter 2

Inventory and Assessment of Existing Programs

Recycling Collection

Currently, recycling operations are also conducted within the county's waste transfer complex. (See Chapter 1 Waste Reduction Element)

Environmental Code Enforcement

Lumpkin County's sole Code Enforcement Officer's responsibilities include soil erosion and sedimentation control and inspections, scrap tire industry regulation, solid waste ordinance enforcement, fielding citizen complaints concerning litter, illegal dumping, illegal burning, land-use code enforcement, subdivision regulatory enforcement, environmental education and outreach, recycling education and outreach, and enforcement of all other county codes.

City of Dahlonega

The City of Dahlonega offers curbside waste services to all citizens on a daily basis, while curbside recycling services are offered one day a week (Wednesday). The city's curbside service is operated as an enterprise fund and entirely supported from those funds created through service revenues. All waste collected through curbside service is taken to the city's waste transfer center within the city public works complex. The City's solid waste production for 2003 was 3,375 tons. **Chart 2.2** illustrates the city's waste production for the past ten years.

Code Enforcement

The City of Dahlonega's sole Code Enforcement Officer's (Marshal) responsibilities include soil erosion and sedimentation control and inspections, scrap tire industry regulation, solid waste ordinance enforcement, fielding citizen complaints concerning litter, illegal dumping, illegal burning, land-use code enforcement, subdivision regulatory enforcement, environmental education and outreach, recycling education and outreach, and enforcement of all other city codes.

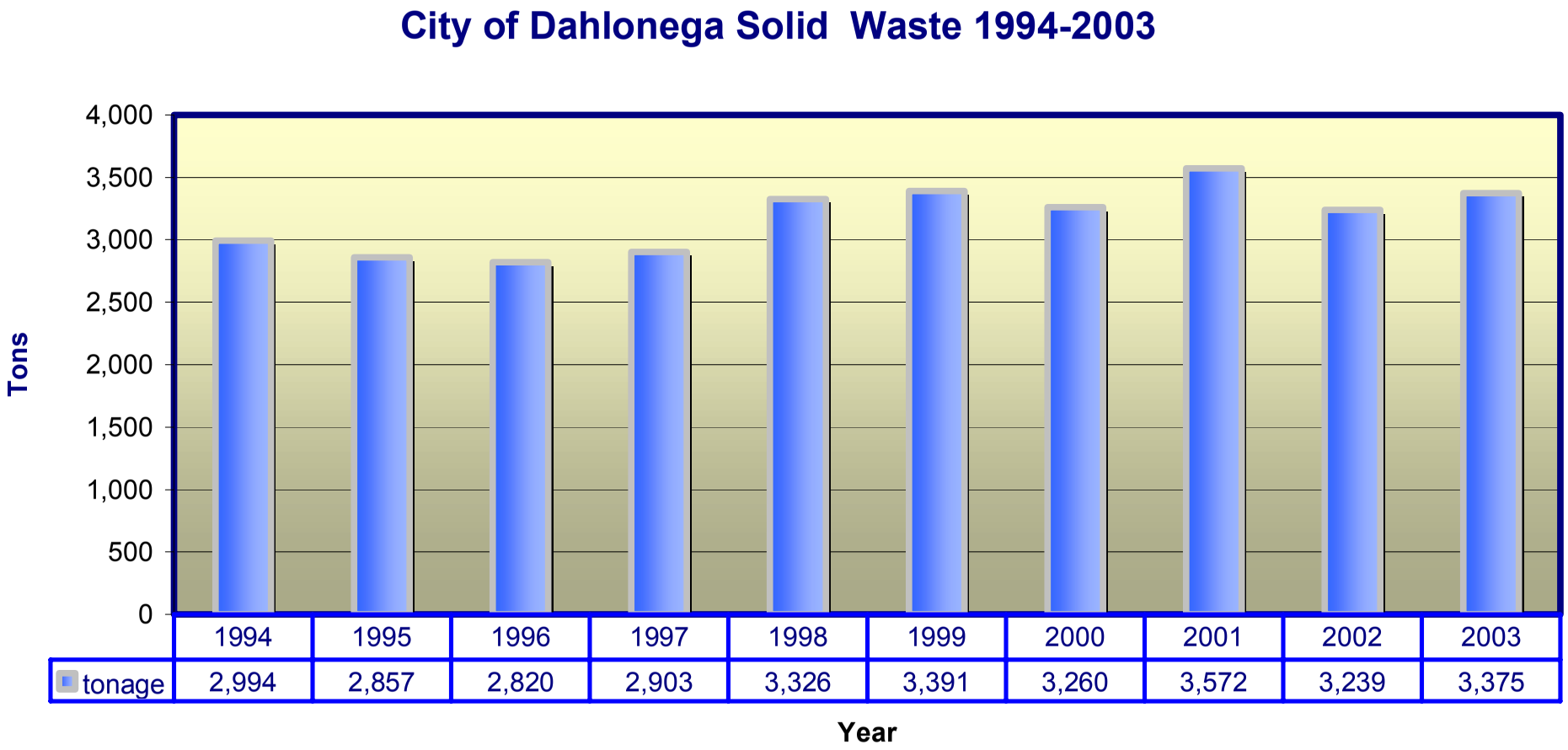

City of Dahlonega Solid Waste 1994-2003
Tons
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0
1994 1995 1996 1997 1998 1999 2000 2001 2002 2003
tonage 2,994 2,857 2,820 2,903 3,326 3,391 3,260 3,572 3,239 3,375
Year

Chart 2.2

Waste Collection Element Chapter 2

Needs and Goals

Lumpkin County and the City of Dahlonega share the goal of insuring cost efficient and operationally effective waste collection services to respective citizens for the subsequent ten-year plan period. Either through sound and sustainable regulatory efforts or direct municipal service delivery, both the county and the city will assure citizen needs are satisfied.

County and city waste collection systems should operate in a manner that insures waste collection is efficient and effective and that individual properties and public roadways are free from litter, instances of illegal dumping, and general refuse. Recycling depots should be established as soon as possible to ensure that the maximum volume of materials is collected. With increased migration and the likelihood of drastic trends in population increases to continue, the county and city should make serious efforts and take strong steps to control and discourage illegal littering and dumping. These efforts should be instituted through expansion of the county's environmental compliance office. County administrators are currently considering the creation of a county marshal's office and if developments toward this end take place, likewise should such enforcement action, including a significant public outreach and education element, take place. Clearly, a single officer directing policy enforcement – given that such enforcement includes waste as well as many other environmental concerns – is painfully inadequate to bring about significant change and more particularly so with expected and drastic increases in population and tourist/commuter traffic within the next five to ten years.

County waste collection will continue to be privatized due to many factors. Private collection companies adequately handle waste collection throughout the county and this free market competition has maintained a reasonable market price index as well as emphasizing efficient services. Due to our county's topography, government subsidized or municipal owned county-wide collection systems are not feasible.

Waste Collection Element Chapter 2

Needs and Goals

The county should develop a regulatory waste collection policy requiring private waste haulers who conduct business within our jurisdiction to obtain collection permits. These permits should contain quarterly reporting requirements for volumes of waste and recyclables. Also included should be mandatory requirements such as items to recycle (in the event mandatory recycling is ever instituted), tarp covers for waste loads, affidavits from waste destinations confirming load volumes, and collection parameters.

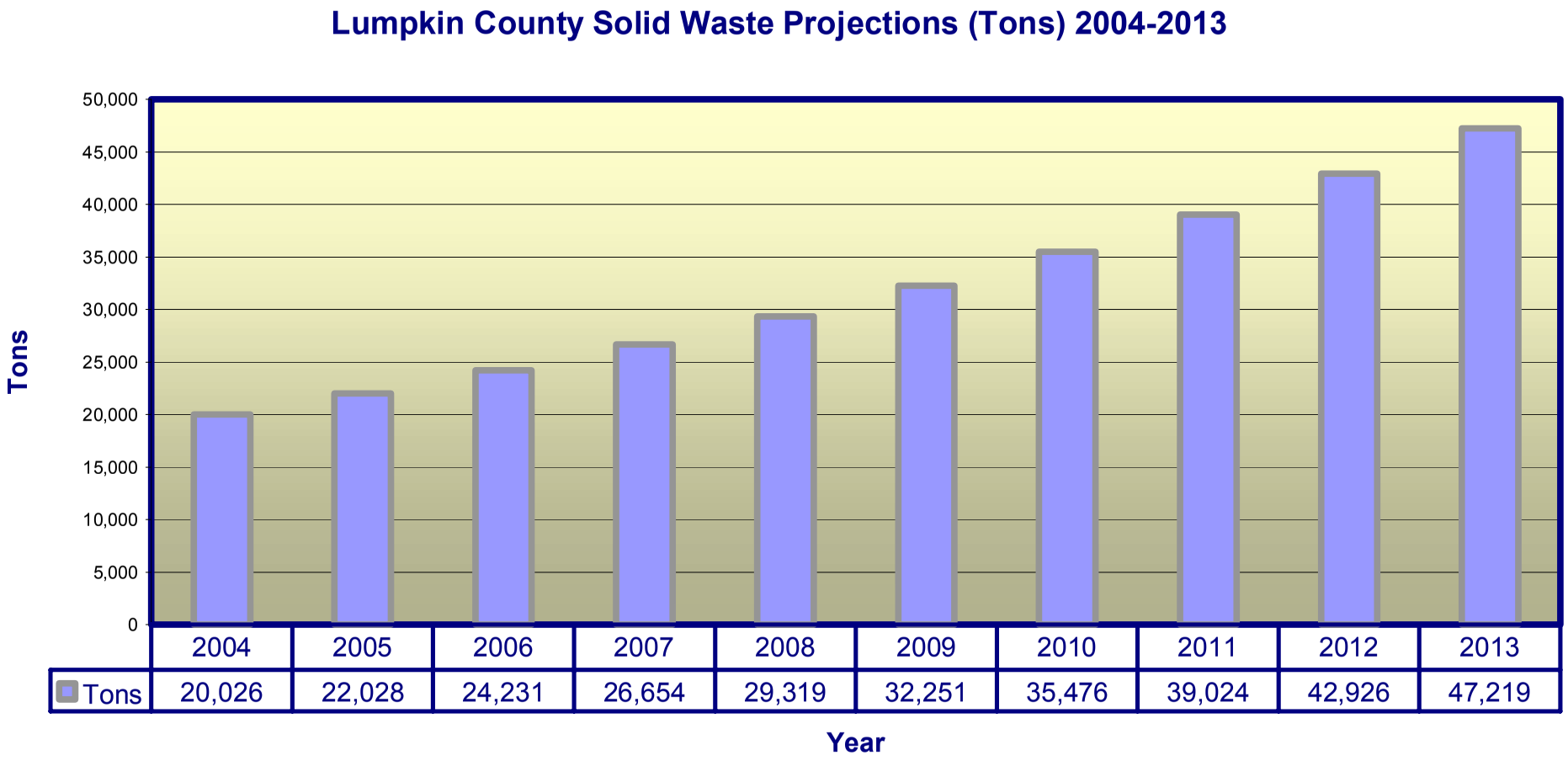
Considering mandatory recycling: if Lumpkin County has not reached or is evidenced to be incapable of reaching a 25% ten year waste reduction goal within the specified planning period, mandatory recycling parameters should be established to replace voluntary efforts. Significant reduction should be accomplished given effective and comprehensive recycling program offerings, increased and vigilant environmental compliance efforts, and education and outreach programs in coordination with private haulers, The City of Dahlonega, and the county school system, yet if these efforts prove futile further and serious consideration should be given to mandatory requirements by both the county and city governments.

Lumpkin County

In October 2004, the Lumpkin County Commission privatized the county transfer center located at the southern terminus of Barlow Road. This facility will remain in operation under the auspice of a local private contractor (Robinson's General Contracting), whose duties will include overseeing both the daily operations of the transfer center and the transfer of collected waste to Pine Bluff Landfill in Cherokee County. All employees of the former county transfer center are employed with this contractor's company. **Chart 3.1** illustrates the county's projected waste for the ensuing planning period.

In the event that the county's routine transfer and disposal of municipal waste is rendered impossible, other options are available. The county has utilized both the BFI-Richland Creek Rd. facility in Gwinnett County and Eagle Point Landfill in Forsyth County as alternatives for municipal waste landfilling. In the unfortunate event of weather related or man-made disasters which interrupt the routine collection of waste or that generate larger quantities of construction and demolition waste or other waste, the severity and particular scenario will dictate the planning region's reaction and/or use of special operations. More severe or widespread instances would require a countywide response orchestrated through the county's Emergency Management Agency, as the lead government within the planning jurisdiction, and overseen by the county's Emergency Management Agency Director. After providing for the general welfare and safety of citizens, operations will proceed with consideration given to reduction, collection, and disposal measures. Given that mass transfer or disposal routines would be interrupted, staging areas could be established that would provide for immediate storage of debris and waste until further arrangements could be made. Contingency plans have been arranged to allow for handling of collection and disposal in those instances when backup measures are necessary.

Chart 3.1



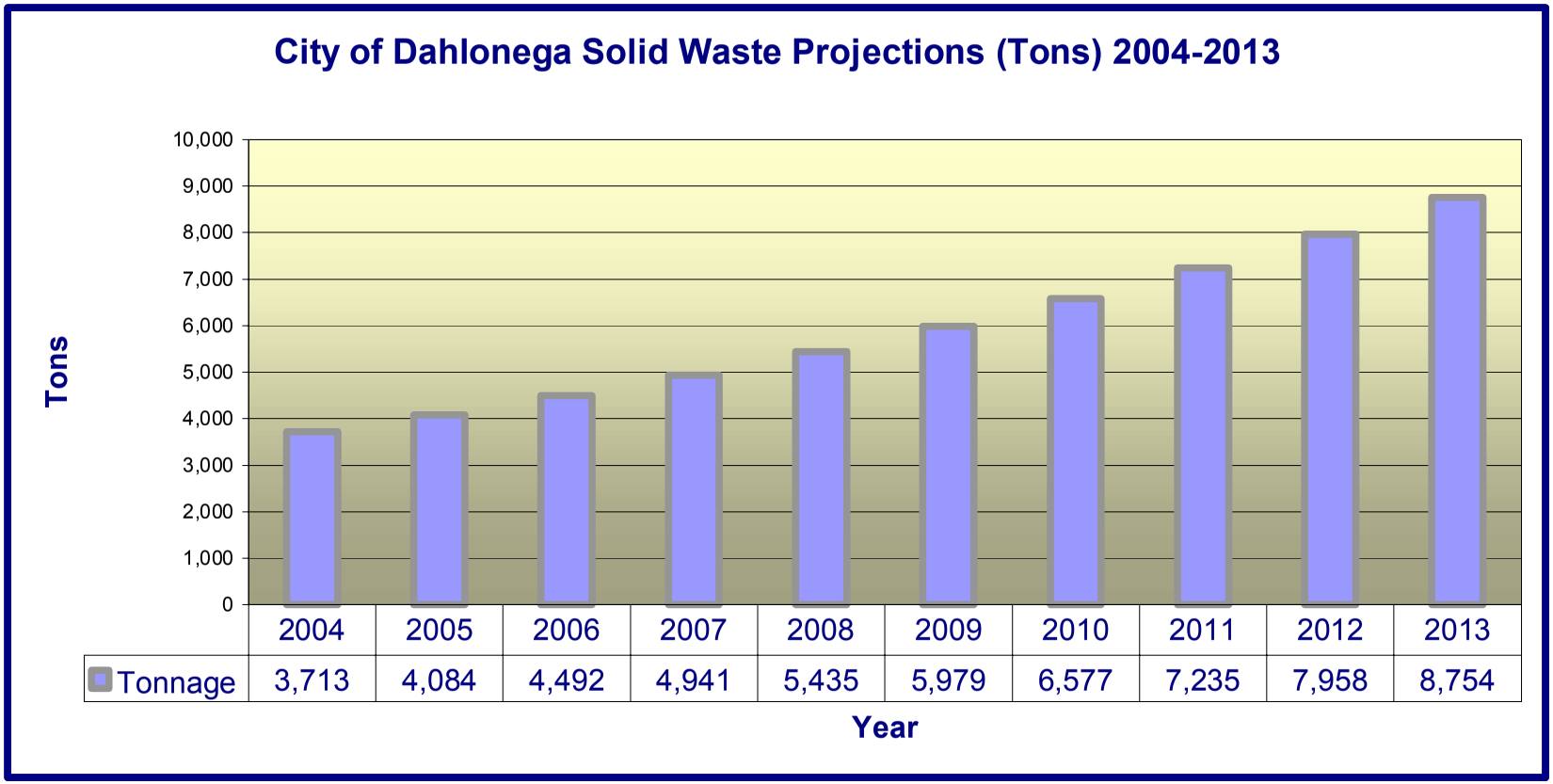
***Projections are based on average yearly (percentage) increase in county waste production for previous ten-year planning period.**

Inert waste disposal is possible through a private inert landfill located off of Burnt Stand RD. adjacent to Hwy. 400. This location accepts all inert debris and currently landfills this debris.

City of Dahlonega

In 2003 the city developed a waste transfer center to serve only that waste which is collected through the city's curbside collection service. Both municipal solid waste and recyclables are collected through this program and transferred via the city's facility to Eagle Point Landfill in Forsyth County. **Chart 3.2** illustrates the city's projected waste for the ensuing planning period.

Chart 3.2



***Projections are based on average yearly (percentage) increase in city waste production for previous ten-year planning period.**

Waste Disposal Element Chapter 3

Needs and Goals

Lumpkin County and The City of Dahlonega share the goal of insuring that the solid waste treatment and disposal facilities serving both local governments and the respective planning region meet regulatory requirements and are in place when needed to support and facilitate effective solid waste handing programs today and for the ensuing ten year planning period, thereby maintaining the quality of citizen life and continuing the community's environmentally sustainable growth.

Disposal options that were considered by the county included waste drop-off depots in conjunction with the aforementioned recycling depots, but were discarded in favor of the privatization option. Construction and demolition materials (C&D) are not accepted at either the county or city transfer stations, however the private inert landfill mentioned before is currently constructing a C&D transfer station to allow for the disposal of these materials in one of many area county (Hall, Forsyth) C&D landfills. This facility is expected to open for business in the spring of 2005. Due to outstanding growth within the building and development community of the use of mulch for temporary soil stabilization, the owner of this facility is considering the grinding of inert materials for viable market use and it is expected that once the inert facility is operating successfully in C&D transfer that this option will be much more economically feasible. Ongoing discussions with county officials and the owner of this facility will continue toward that end.

Land Limitation Element Chapter 4

Inventory and Assessment of Existing Programs

The Rules of the Georgia Department of Community Affairs Minimum Planning Standards and Procedures for Solid Waste Management provide for the identification of areas that are unsuitable for development of solid waste, recycling and composting facilities. Natural environmental limitations include water supply watersheds, groundwater recharge areas, wetlands, river corridors, and protected mountains. Further, OCGA 12-2-8(g)(B) ii specifically prohibits "hazardous or sanitary waste landfills" within river corridors described in the 'part V criteria' and expanded within the Georgia Department of Natural Resources Rule 391-3-16 as those ecological areas of particular sensitivity to development and in need of specific protections. This criteria also includes those areas previously mentioned as having unsuitable potential for solid waste facility installations. Those areas unsuitable for solid waste facilities are depicted in the Lumpkin County Land Limitation Assessment Areas for Future Solid Waste Facilities Map accompanying this multi-jurisdictional solid waste management plan and descriptions of those areas and their limitations will be delineated using the overlay grid provided. Those areas unsuitable for solid waste facility development shall include any and all lands shown on the Lumpkin County Land Limitation Assessment Areas for Future Solid Waste Facilities Map as "Areas of Limitation" and that are not otherwise shown to be suitable for such developments.

Natural Environmental Limitations

In general, those areas unsuitable for solid waste facilities can be classified as including grid cells B5 through H7 and extending north to south, eventually forming a horizontal line of exclusion which envelops grid cells H1 through H7.

Water Supply Watersheds - The sole water supply reservoir in Lumpkin County, The Yahoola Reservoir, and its watershed are included in grid cells D5, E4 and E5, F4 and F5, G4 through G6, H5, and I5. Due to stream buffer setback requirements, residential densities, and existing commercial activities within these cells, these areas are deemed highly undesirable locations for solid waste facilities. Lumpkin County and the City of Dahlonega deem this area unsuitable for solid waste facility installations.

Wetland Areas – Due to the relatively higher elevation of most of both Lumpkin County and the City of Dahlonega, wetland areas are not a significant impediment to locating solid waste facilities. Those areas delineated as wetlands on the provided county map will, however, be protected in accordance with all laws, rules, and regulations

promulgated through either federal or state government. Any activity involving development within wetland areas shall be required to obtain a Section 404 permit from the U.S. Army Corps of Engineers. It is prohibited to establish hazardous or sanitary waste landfills adjacent to or within those areas delineated as freshwater wetlands.

River Corridors – Lumpkin County hosts two major river corridors: the Etowah River (Coosa Basin) and the Chestatee River (Chatahoochee Basin), which feed two major drinking water reservoirs within the state, Lake Allatoona and Lake Sydney Lanier, respectively. These rivers and their 100 ft. buffer areas are represented on the assessment grid. Close examination of these areas also reveals the substantial acreage of flood basin adjacent to and contiguous with both the Etowah and the Chestatee Rivers, increasing moving southward. Development within these floodways requires notification of the Federal Emergency Management Agency (FEMA) and particularly so concerning development which entails changes in the established elevations of these areas. Changes to established elevations within 100 year floodplain areas would require submission of Conditional Letters of Map Revision to FEMA, including hydraulic, hydrological, survey, and watershed studies. Lumpkin County and the City of Dahlonega deem these areas unsuitable for the installation of solid waste facilities.

General Topographical Features - Those areas lying north of the delineated line represented by grid cells H1through H7 demonstrate further topographical limitations due to a combination of steep slopes (gradients beyond 25%) and drastic geographical features.

Additional Limitations

City of Dahlonega – The City of Dahlonega deems all those areas lying within the city limits and jurisdiction as unsuitable for the installation of solid waste handling facilities. Given that the city owns and operates its own solid waste transfer and recycling facilities and operates curbside collection systems for said materials, facilities outside of those

parameters are deemed beyond the realm of acceptable development. Floodplain areas, watershed areas, and residential / commercial development densities are further factors involved in this prohibition.

Wimpy Airport and Buffer Area – The Lumpkin County Airport (Wimpy Airport) and its outlying protected area (10,000 ft.) are deemed unsuitable to solid waste facility installations pursuant to Department of Natural Resources Rule 391-3-4-.05(1)c.

Land Limitation Element Chapter 4

Needs and Goals

Lumpkin County has a goal to insure that proposed solid waste handling facilities are located within areas suitable for such developments, are compatible with surrounding property uses, and are not considered for locations in areas which have been identified by the local community, this Multi-jurisdictional Solid Waste Management Plan, the planning region, or the Georgia Department of Natural Resources as having environmental, historical, or other development or land-use limitations.

Those areas suitable for solid waste related facility developments shall include any and all lands lying south of the demarcation line indicated by grid cells H1 through H7 on the Lumpkin County Land Limitation Assessment Areas for Future Solid Waste Facilities Map and which are not otherwise subject to prohibition or 'land limitation' in accordance with this Multi-jurisdictional Solid Waste Management Plan, Rule 391-3-4 of the Georgia Department of Natural Resources, Chapter 110-4-3 of the Rules of the Georgia Department of Community Affairs, the Georgia Solid Waste Management Act, OCGA 12-8-20 *et seq.*, the City of Dahlonega Zoning Ordinance 91-9, and the Lumpkin County Land-Use Code. Such areas may be seen to include all or part of grid cells I1 through L5, and which are not otherwise prohibited, under the specifications of aforementioned land or legal limitations.

The procedures applicable to development and installation of solid waste facilities within those areas deemed suitable are outlined within the Lumpkin County Land-Use Code and are as follows:

> **Sec. 304c(10)** – specifies that solid waste 'handling or disposal' facilities be classified as Intensive Industrial uses.
>
> **Sec. 304(d)** – specifies that uses defined as intensive industrial must file an application requesting a Special Land-Use Approval (SLUA) with the county planning Office.
>
> **Sec. 506(a)** – specifies that any use considered "environmentally hazardous" (this includes solid waste facilities) be required to comply with all federal and state

codes, obtain all necessary federal and state permits, and provide noise and air pollution abatement plans as part of the SLUA process.

Sec. 507(e) - specifies that waste handling or disposal facilities meet fencing and setback guidelines; that sanitary landfill meet engineering design, operational, setback, survey, loading, and compaction guidelines.

Sec. 803 (a, b, c) – specify the initiation, required application information, 15 day public notice period, and public hearings processes that are necessary for special (including all intensive industrial) uses.

Sec. 803 (d) – specifies those questions which are applicable to any application for a SLUA:

1) Is the proposed request consistent with the purpose and intent of the character area, village, or corridor in which it is located or proposed to be located?
2) Is the proposed request consistent with the purpose and intent of this Land Use Code as stated under chapter 1?
3) Will the proposed request cause a burden on present county infrastructure?
4) Is the proposed request compatible with surrounding land uses within the character area and adjacent properties?
5) Is the proposed request consistent with the goals, strategies, and policies of the Comprehensive Plan?
6) Is the proposed request required to adequately address new or changing conditions or to properly implement the Comprehensive Plan?
7) Does the proposed request reasonably promote the public health, safety, morality, or general welfare?

Sec. 804 Special Land Use Approval - specifies that special land use approval is required for all intensive industrial uses and that this approval is subject to detailed concept plan and impact analysis requirements which relate to engineering, environmental, community impact, and infrastructure impact studies.

Regulatory Needs

The Lumpkin County Commission should amend those sections within the Land-Use Code applicable to Special Land-Use Approval to include provisions related to

compliance with this Multi-jurisdictional Solid Waste Management Plan. Specifically, these amendments should address anticipated impacts of proposed facilities on current

solid waste management facilities and infrastructure; the anticipated impact proposed facilities will have upon adequate collection and disposal capabilities within the planning area; and the effect proposed facilities will have upon waste generated within the state achieving the state's 25% per capita waste disposal reduction goal. Specific reference should be made to provisions of the Solid Waste Management Plan in analysis of proposed waste collection, disposal, transfer, recovery, or reduction facilities in order that planning consistency be established and that continuity in waste policy be strictly established.

Public Education/Outreach Element Ch. 5

Inventory and Assessment of Existing Programs

Lumpkin County is a founding member of Keep Our Mountains Beautiful, a Keep America Beautiful Affiliate. Certified in 1999 KOMB is the second regional affiliate in the state of Georgia. From 1999 through 2003 KOMB had an environmental specialist who, using the Waste in Place Curriculum as well as other educational components, worked with children within the Lumpkin County School System to help them understand the importance of protecting our natural resources. Presentations are made to civic organizations and businesses in an effort to increase their awareness of our environment and the need to implement recycling programs within the community and their businesses. Educational totes made up of learning materials and worksheets were provided to each school system to allow teachers to take programs into their classrooms at any time and the teachers were trained in all the provided materials. Bring-One-for-the-Chipper, Adopt-A-Road programs, Litter abatement, America Recycles Day and the Great American Clean-up are all programs implemented by KOMB. Working with the county's Code Compliance Office and the City of Dahlonega, these and other educational programs have had a positive impact in Lumpkin County.

Public Education/Outreach Element Ch. 5

Needs and Goals

With the establishment of the Regional Recycling Cooperative administrated through the North Georgia Resource Management Authority, the county and city will be greatly accelerating their role in both public education and private industry outreach. Each member county within the regional cooperative has agreed to the establishment of an environmental commission consisting of nine (9) members including county representatives, city representatives, and local citizens. This commission will make recommendations to the county commission and city council concerning environmental issues with respect to solid waste, recycling, and water resources. The environmental commission will also help to involve and educate the community concerning environmental problems and issues, organize events concerning natural resources and recycling such as Earth Day, chipping programs, and community composting, and Coordinate with government and non-profit entities concerning environmental program efforts and community needs.

The county should hire an environmental educator to be staffed through the Environmental Compliance Office, whose duties would include in-school programs, coordinating with the citizen commission, public information brochures and presentations, and private industry outreach with respect to recycling cooperation. This educator would have extensive contact and cooperation with NGRMA and be heavily involved with regional cooperative efforts as well. Programmatic duties would involve expansion of workplace recycling efforts, the adopt-a-stream program, the adopt-a-road program, and in-school youth group organization.

Appendix

List of Charts and Tables

Appendix

List of Maps